

REMARKS

Reconsideration and withdrawal of the rejection of the application are respectfully requested in view of the following remarks:

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-13, 15-17 and 19-23 are pending in this application.

II. REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 1-13, 15-17 and 19-21 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,558,926 to Tate et al. (“Tate”) in view of U.S. Patent No. 4,559,258 to Kiuchi (“Kiuchi”).

Independent claim 1 recites:

“A fabric having a fabric caliper, said fabric having a top surface coating that encapsulates fifty percent or less of the fabric caliper and said fabric comprising one or more guides attached to machine direction edges of a wear surface of the fabric so as to encapsulate approximately fifty percent or more of the fabric caliper with guide material in a region where the guide is attached to the fabric, wherein the guides are substantially v-shaped.” (Emphasis added)

Accordingly, one embodiment of the instant invention is directed to a fabric having a top surface coating that encapsulates fifty percent or less of the fabric caliper and comprising one or more guides attached to machine direction edges of a wear surface of the fabric so as to encapsulate approximately fifty percent or more of the fabric caliper.

In the action, the Examiner asserts that coatings 12 and 12' shown in Fig. 2 of Kiuchi encapsulate half (50%) of the fabric 11. However, the relied upon portions of Kiuchi disclose that “layers of synthetic resin 12, 12' are formed on both inside and outside surfaces of an endless base fabric 11, and a number of drain channels 14 are then provided over the entire

surface of a belt with which felt comes into contact.” Therefore, Applicants respectfully submit that Kiuchi does not disclose that the coatings encapsulate 50% or more of the fabric.

Applicants further submit there is no motivation for one skilled in the art to combine the teachings of Tate with Kiuchi, because Kiuchi does not even disclose any percentage encapsulation.

Kiuchi is a shoe press belt, which is entirely impregnated with resin through its entire thickness (and above the base plane). If the thickness of the first layer impregnates the entire base, then the subsequent resin layers will not have any exposed base fabric to attach to. It is to be noted that in almost all nonreactive systems used for shoe press belts, and certainly, those used in 1985, the attachment of resin to the base was purely mechanical.

The instant belt has increased resistance to tearing because of the 50% or more encapsulation of the guides. On the other hand, in Tate, when the fabric structure is filled with the resin layer applied to the face side of the fabric to 85% of it's thickness, that only leaves 15 % of the structure to adequately bond the guide. *Tate*, col. 4, lines 40-51.

The instant invention recognizes this shortcoming of Tate, which is why the face side resin layer penetrates the structure less, and the actual guide itself, when formed on the backside or driveside of the belt, penetrates further into the base structure by a factor of at least three when compared to Tate. It is the guide member penetration into the fabric which improves the belt's resistance to tearing off, and not the face side resin layer.

Therefore Applicants submit that none of the cited references, considered either alone or in combination, teach or suggest the above identified feature of claim 1. Specifically, none of Tate and Kiuchi, considered either alone or in combination disclose or suggest, a fabric having a top surface coating that encapsulates fifty percent or less of the fabric caliper and said fabric

comprising one or more guides attached to machine direction edges of a wear surface of the fabric so as to encapsulate approximately fifty percent or more of the fabric caliper with guide material in a region where the guide is attached to the fabric, wherein the guides are substantially v-shaped, as claimed in independent claim 1.

For at least the foregoing reasons, Applicants submit that claim 1 is patentable over the combination of Tate and Kiuchi.

Claims 1-13, 15-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,008,801 to Reilly et al. ("Reilly") in view of Kiuchi.

As to Reilly, it relates to a conveyor belt guide comprising a plurality of guide sections, each including an integral polyurethane elongated rib and base web having a width substantially greater than the rib at its juncture with the web. Reilly, specifically, discloses that portions of the polyurethane are molded into the interstices of the fabric backing (32) so that the backing is securely and positively attached to the polyurethane. *Reilly*, col. 3, lines 27-42. Applicants submit that the molding into interstices of the fabric that the Examiner refers to is basically between the polyurethane and the fabric backing 32 and not between the guides 21 and the conveyer belt 16. *Id.*, Figs. 1-4.

Thus, contrary to the Examiner's suggestion, there is no teaching or suggestion of the above identified features in Reilly either.

Furthermore, in Reilly, the guide itself is cast in one piece, and the base (web) contains an impregnated fabric backing. This backing is what is used to improve adherence of the guide to the belt, the guide being adhesively attached to the belt surface (col. 4, lines 56-59). Therefore, Applicants submit that Reilly teaches away from the instant invention, and for at least

this reason, the teachings of Reilly cannot be combined with Kiuchi to derive the instant invention.

Indeed, none of the references, considered either alone or in combination, teach or suggest that the guide material itself penetrates into the belt surface. Specifically, none of Reilly and Kiuchi, considered either alone or in combination disclose or suggest, a fabric having a top surface coating that encapsulates fifty percent or less of the fabric caliper and said fabric comprising one or more guides attached to machine direction edges of a wear surface of the fabric so as to encapsulate approximately fifty percent or more of the fabric caliper with guide material in a region where the guide is attached to the fabric, wherein the guides are substantially v-shaped, as claimed in independent claim 1.

For at least the foregoing reasons, Applicants submit that claim 1 is patentable over the combination of Reilly and Kiuchi.

III. DEPENDENT CLAIMS

Claims 22-23 were further rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Tate or Reilly in view of GB 2106557 to Curry et al. (“Curry”).

As to Curry, it relates to an impermeable shoe press belt that indeed is impregnated over its entire surface with a resin coating. As this is well known to those skilled in the art, not only is Curry’s belt used only in papermaking, but while in use, it never contacts the paper product, thus always being on the inside of a press fabric, and therefore it does not require any V-guides. Applicants submit that this impermeable belt would not be able to function in the intended manner of the instant invention.

The dependent claims in this application are each dependent from independent claim 1 discussed above and are therefore believed patentable for the same reasons. Since each

dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

Statements appearing above with respect to the disclosure in the cited reference represent the present opinions of the Applicant's undersigned attorney and, in the event that the Examiner disagrees with any such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the respective reference providing the basis for a contrary view.

CONCLUSION

In view of the foregoing remarks, it is concluded that all of the claims in this application are patentable over the prior art, and an early and favorable consideration thereof is solicited.

Please charge any fees incurred by reason of this response and not paid herewith to
Deposit Account No. 50-0320.

Respectfully submitted,
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